

14 of the video signals and the time code information on a
15 [recording] storage medium;

16 time code reader means, responsive to the
17 composite video signal from the video [tape recorder]
18 image storing means, for decoding the time code
19 information for each frame of the composite signal; and

20 robot controller means for controlling the path
21 of movement of the robot arm in accordance with a stored
22 control program, the robot controller means being
23 responsive to the [decoded] time code information [from
24 the time code reader] for storing the position
25 coordinates of the robot arm along the path of movement
26 for each distinct time code associated with the video
27 signal on a video signal frame by frame basis and for
28 synchronizing the movement of the robot arm along its
29 predetermined path of movement with the time code
30 information [from the time code reader] during the
31 generation of video signals and time code information
32 from the storage medium on a frame-by-frame basis.

1 2. (Amended) The apparatus of Claim 1
2 further comprising:

3 monitor means, connected to the video [tape
4 recorder] image storing means, for displaying video
5 images from one of the video camera and the composite
6 image recorded on [a video tape] the storage medium.

1 3. (Amended) [The] A video time code
2 synchronized robot control apparatus [of Claim 1 wherein]
3 comprising:

4 a robot including an arm movable through a path
5 of movement;

6 a video camera, mounted on the arm of the
7 robot, for generating video signals during movement of
8 the video camera;

9 time code generator means for generating time
10 code information;

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11 the video signals from the video camera [are]
 12 being output to the time code generator means; [and]
 13 video recorder means, responsive to the video
 14 signals from the video camera and the time code
 15 information from the time code generator means, for
 16 recording a composite signal formed of the video signals
 17 and the time code information on a recording medium;
 18 the time code generator means [outputs]
 19 outputting the video signals and the time code
 20 information to the video [tape] recorder means[.];
 21 time code reader means, responsive to the
 22 composite video signal from the video recorder means, for
 23 decoding the time code information for each frame of the
 24 composite signal; and
 25 robot controller means for controlling the path
 26 of movement of the robot arm in accordance with a stored
 27 control program, the robot controller means being
 28 responsive to the decoded time code information from the
 29 time code reader for synchronizing the movement of the
 30 robot arm along its predetermined path of movement with
 31 the time code information from the time code reader on a
 32 frame-by-frame basis.

1 5. (Amended) [The] A video time code
 2 synchronized robot control apparatus [of Claim 1 wherein]
 3 comprising:
 4 a robot including an arm movable through a path
 5 of movement;
 6 a video camera, mounted on the arm of the
 7 robot, for generating video signals during movement of
 8 the video camera;
 9 time code generator means for generating time
 10 code information;
 11 video recorder means, responsive to the video
 12 signals from the video camera and the time code
 13 information from the time code generator means, for

14 recording a composite signal formed of the video signals
 15 and the time code information on a recording medium;

16 the video signals from the video camera [are]
 17 being output to the video [tape] recorder means; [and]
 18 the time code information from the time code
 19 generator means [is] being output to the video [tape]
 20 recorder means[.];

21 time code reader means, responsive to the
 22 composite video signal from the video recorder means, for
 23 decoding the time code information for each frame of the
 24 composite signal; and

25 robot controller means for controlling the path
 26 of movement of the robot arm in accordance with a stored
 27 control program, the robot controller means being
 28 responsive to the decoded time code information from the
 29 time code reader for synchronizing the movement of the
 30 robot arm along its predetermined path of movement with
 31 the time code information from the time code reader on a
 32 frame-by-frame basis.

1 7. (Amended) [The] A video time code
 2 synchronized robot control apparatus [of Claim 1 wherein]
 3 comprising:

4 [the video signals from the video camera are
 5 input to a]

6 a robot including an arm movable through a path
 7 of movement;

8 a video camera, mounted on the arm of the
 9 robot, for generating video signals during movement of
 10 the video camera;

11 combined video time code generator and reader
 12 means for separately generating time code information and
 13 for decoding time code information, [the time code
 14 information being output to the video tape recorder.]

15 video recorder means, responsive to the video
 16 signals and the time code information from the combined
 17 time code generator and reader means, for recording a

18 composite signal formed of the video signals and the time
 19 code information on a recording medium;
 20 the time code information being output from the
 21 video recorder means to the reader portion of the
 22 combined time code generator and reader means; and
 23 robot controller means for controlling the path
 24 of movement of the robot arm in accordance with a stored
 25 control program, the robot controller means being
 26 responsive to the decoded time code information from the
 27 combined time code generator and reader means for
 28 synchronizing the movement of the robot arm along its
 29 predetermined path of movement with the time code
 30 information from the combined time code generator and
 31 reader means on a frame-by-frame basis.

1 9. (Amended) [The] A video time code
 2 synchronized robot control apparatus [of Claim 1 wherein]
 3 comprising:
 4 a robot including an arm movable through a path
 5 of movement;
 6 a video camera, mounted on the arm of the
 7 robot, for generating video signals during movement of
 8 the video camera;
 9 time code generator means for generating time
 10 code information;
 11 video recorder means, responsive to the video
 12 signals from the video camera and the time code
 13 information from the time code generator means, for
 14 recording a composite signal formed of the video signals
 15 and the time code information on a recording medium;
 16 time code reader means, responsive to the
 17 composite video signal from the video recorder means, for
 18 decoding the time code information for each frame of the
 19 composite signal; and
 20 robot controller means for controlling the path
 21 of movement of the robot arm in accordance with a stored
 22 control program, the robot controller means being

23 responsive to the decoded time code information from the
 24 time code reader for synchronizing the movement of the
 25 robot arm along its predetermined path of movement with
 26 the time code information from the time code reader on a
 27 frame-by-frame basis the robot controller means
 28 [includes] including:

29 means for identifying the positional
 30 coordinate of the robot arm corresponding in time with
 31 each frame of video signals generated by the video
 32 camera; and

33 the robot controller means further
 34 including means for moving the robot arm to the
 35 identified positional coordinates corresponding to any
 36 frame of video signals as the time code information
 37 identifying the any frame of video signals is input
 38 thereto from the time code reader means.

1 10. (Amended) A method of generating video
 2 images comprising:

3 programming a robot to repeatedly move a video
 4 camera mounted on the end of a movable arm of the robot
 5 through a predetermined path of movement;

6 operating the video camera to generate video
 7 signals from the camera during movement of the arm of the
 8 robot along the predetermined path of movement;

9 generating [time code] video signal frame
 10 identification information in conjunction with the
 11 generation of video signals on a frame-by-frame basis of
 12 the generated video signals;

13 storing the position coordinates of the robot
 14 arm along the predetermined path of movement for each
 15 distinct one of the video signal frame identification
 16 information on a video signal frame-by-frame basis;

17 [recording] storing the video signals and the
 18 [time code] video signal frame identification information
 19 as a composite signal on a [recording] storage medium on
 20 a frame-by-frame basis; and

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